

BEST AVAILABLE COPY

REMARKS

Claims 1-3 and 8-14 are pending.

Claims 1 and 9 have been amended to clarify that "at least part of said second low concentration drain region is extended to an area under said gate electrode." Support for such an amendment can be found, for example, in FIG. 3 of the current application. Claims 8 and 9 have been cosmetically amended to clarify the subject matter. No new matter has been added.

Drawings

Fig. 2 has been objected to for containing "5B," which is not mentioned in the specification.

Applicants submit corrected drawings FIGS. 1 and 2 with the reference "5B" replaced with "5." Withdrawal of this objection is respectfully requested.

Specification

The abstract has been objected to for containing informalities.

Applicants have amended the abstract to obviate the objection. No new matter has been added. Withdrawal of this objection is respectfully requested.

Claim Rejections – 35 USC §112

Claims 8 and 9 have been rejected for containing informalities.

Claims 8 and 9 have been cosmetically amended to correct the informalities and to obviate the rejections. No new matter has been added. Withdrawal of this objection is respectfully requested.

Claim Rejections – 35 USC §102

Claims 1, 8 to 11, and 14 have been rejected as being anticipated by Kawaguchi et al. Applicants submit that that invention as claimed is not taught or suggested by the Kawaguchi reference for the following reasons.

BEST AVAILABLE COPY

Claim 1 recites:

1. (Currently Amended) A semiconductor device comprising:
a gate electrode formed on a first conductive type semiconductor substrate through a gate oxide film;
a first low concentration drain region of a second conductive type, provided at one end of said gate electrode;
a second low concentration drain region of the second conductive type, provided in said first low concentration drain region, said second low concentration drain region being disposed close to an outer boundary of said first low concentration drain region and being higher in impurity concentration than at least an impurity concentration of the first low concentration drain region, **wherein at least part of said second low concentration drain region is extended to an area under said gate electrode;**
a high concentration source region of the second conductive type provided at another end of said gate electrode; and
a high concentration drain region of the second conductive type formed in said second low concentration drain region, said high concentration drain region being spaced away a predetermined distance from said gate electrode and being higher in impurity concentration than the second low concentration drain region. (Emphasis added)

Applicants respectfully submit that the Kawaguchi reference does not disclose, teach or suggest at least the above bolded features. For example, Fig. 3 of the Kawaguchi reference shows a layer 15 that extends under layer 16 but does not extend to an area under electrode 19. That is, a resistance element is formed between layer 15 and layer 14, resulting in an undesirable decrease of the ON resistance of the transistor. Thus, at least for this reason, claim 1 is not anticipated by the Kawaguchi reference.

Accordingly, because claims 2-3, 8, and 11-14 depend from claim 1, claims 2-3, 8 and 11-14 should be allowable for at least the same reasons as claim 1.

Claim 9 has been amended to recite similar subject matter as the above bolded features of claim 1. Thus, claim 9 should be allowable for at least the same reasons as claim 1. Because claim 10 depends from claim 9, claim 10 should be allowable for at least the same reasons as claim 9.

Claim Rejections – 35 USC §103

Applicant : Shuichi Kikuchi et al.
Serial No. : 09/943,667
Filed : August 31, 2001
Page : 9 of 9

Attorney's Docket No.: 10417-094001 / F51-
137276M/NS

BEST AVAILABLE COPY

Claims 2, 3, 12, and 13 have been rejected as being unpatentable over Kawaguchi et al. in view of Wolf.

Claim 1 should be patentable for at least the reasons given above. Because claims 2, 3, 12 and 13 depend from claim 1, claims 2, 3, 12 and 13 should be allowable for at least the same reasons as claim 1.